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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,297	10/13/2000	Mark Millet	CISCP136/1846	8657

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EXAMINER

RAMAN, USHA

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/687,297	MILLET ET AL.	
	Examiner	Art Unit	
	Usha Raman	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-48 is/are pending in the application.
- 4a) Of the above claim(s) 22-28, 35 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 29-34 and 36-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1, 29, 36 and 37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-20, 29-34, and 36-47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claims 1, 29, 36 and 37 all recite limitations of a provisioning system located at a network management station. However, the disclosure is silent on the location of the provisioning system. The claim has been best interpreted as a provisioning system located remote to the CMTS.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-20, 29-34, and 36-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOCSIS Radio Frequency Interface Specification (SP-RFI-I04-980724), published in July 24th, 1998 in view of Woundy (US Pat. 6,023,464).

In regards to claims 1, 29, 36, and 37, the DOCSIS Radio Frequency Interface (henceforth referred to as RFI) specification discloses in a cable modem termination system (CMTS), a method of provisioning a selected cable modem in a cable modem network having a provisioning system, comprising the steps of:

Transmitting a configuration file (parameter file) to the selected cable modem thereby allowing the selected cable modem to provision; (see figure 7-11 in page 109 – this is performed upon cable modem initialization).

Performing periodic ranging between the selected cable modem and the CMTS (see page 109);

Interrupting the periodic ranging thereby causing the selected cable modem to return to a synchronization process with cable modem network (the cable modem transmits a ranging request, and then upon a non-receipt of a ranging response after T4 time (i.e. signal loss) or upon receipt of abort ranging command, resets and reinitializes the cable modem, see fig. 7-13 in page 112, page 99 and page 115) and causing the selected cable modem to re-receive a configuration file in accordance with initialization routine. The DOCSIS RFI specification further discloses that a various servers, including a provisioning server may be located at the CMTS, or at locations other than the CMTS. See page 5. The RFI specification however is silent

on the step a provisioning system deliberately resetting the cable modem in order to change the service class.

Woundy discloses a method of changing the provisioning status of a cable modem by the provisioning server resetting a cable modem in order to effect the new operation parameters. See column 3, lines 45-53.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system in view of Woundy by allowing a provisioning system to deliberately reset a cable modem in order to change the provisioning status of a cable modem, thereby allowing the a user to change a service class.

In regards to claims 2, 8, 30, 38, and 43, the RFI specification discloses the step of receiving a "reset" command (abort ranging sent in the RNG-RSP, causing the cable modem to reset and reinitialize) from the provisioning system associated with the cable modem network. See figure 7-13 in page 112).

In regards to claims 3, 9, 31, 39, and 44 the RFI specification discloses the step of receiving a abort ranging command at the cable modem, causing the CMTS to interrupt the periodic ranging between the CMTS and selected cable modem and reinitialize MAC (see figure 7-13 in page 112).

In regards to claims 4, 32, 40, the abort-ranging command further causes discontinuing transmission of a ranging opportunity message to the selected modem (since the modem must go through initialization routine (see figure 7-13 in page 112 and figure 7-1 in page 98)

In regards to claims 5, 20, and 41, the RFI specification further teaches the use of SNMP commands for communication between the CMTS and CM. See page 11, section 3.1.1. and figure 3-1.

In regards to claims 6, and 19, the interrupting of periodic ranging causes a cable modem to reinitialize, thereby bypassing a power on phase.

In regards to claims 7, and 42, upon synchronizing/resynchronizing with the cable modem network, the cable modem receives a configuration file for setting its parameters. See figure 7-11, in page 109).

In regards to claims 10, 11, 33, 45, and 46, the ranging abort message is sent to the cable modem in the ranging response message, causing a RF failure in the selected cable modem. See figure 7-13 in page 112 and section 7.2.14 in page 110).

In regards to claims 12 and 16, the ranging abort command causes the cable modem to reinitialize, which causes the cable modem to resynchronize with the cable modem network for re-receipt of a UCD. See figure 7-1 in page 98 and section 7.2.2 in page 99.

In regard to claim 13, the configuration file contains data to be used to provision the selected cable modem. See page 128, 129 and section 7.2.10 pages 108-109.

In regards to claim 14, the DOCSIS RFI specification applies to DOCSIS compliant modems.

In regards to claims 15 and 47, see claims 1 and 4.

In regards to claim 17, see claims 1 and 7. During the first initialization cycle, the cable modem receives a first configuration file, and during the re-initialization the cable modem receives a second configuration file.

In regards to claim 18, the RFI specification discloses performing the re-initialization (i.e. repeating initial provisioning) after a time of T4 (further set as 30 seconds) of the cable modem not receiving a ranging opportunity message. See figure 7-13 in page 112 and page 125.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

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assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR


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